

REMARKS

In the Office Action dated February 25, 2003, the Examiner rejects claims 1-8 under 35 U.S.C. § 102(b). The Examiner rejects claim 11 under 35 U.S.C. § 103(a). Finally, the Examiner objects to claims 9 and 10. With this Amendment, claims 9, 10 and 11 are amended. Claims 12-20 are added. After entry of this Amendment, claims 1-20 are pending in the Application. For the foregoing reasons, the Application is allowable over the prior art of record.

The undersigned wishes to express appreciation to Examiner Mohandesu for his courtesies during an interview with Applicants' counsel Michelle L. Knight, Reg. No. 47711, on April 30, 2003. In that conversation, Ms. Knight requested clarification of the Office Action. Specifically, Ms. Knight requested clarification as to what the Examiner considered to be the first and the second portions of the lubricant recirculation member, as only one element 202 was identified in the rejection of claims 1-8. The Examiner clarified that element 202 in Fig. 9 was considered to be the first portion and element 212 in Fig. 9 was considered to be the second portion.

With this Amendment, the Applicants have corrected numerous typographical errors in the original specification. In addition to these changes, the Applicants have corrected certain errors in numbering elements. Finally in the specification, the Applicants have made certain changes to conform the specification to the drawing figures. The changes to the drawing figures have been made to conform the figures to the specification and the claims and to correct certain errors in labeling elements. It is respectfully submitted that none of the changes to the specification and the drawing figures add new matter to the Application as filed.

The Applicants gratefully acknowledge the indication of allowable subject matter in each of claims 9 and 10. Each has been rewritten to independent form to include the features of claim 1. It is respectfully submitted that each of claims 9 and 10 is now in suitable condition for allowance.

The Examiner rejects claims 1-8 under 35 U.S.C. § 102(b) as being anticipated by Nelson et al. (3,814,961). It is respectfully submitted that Nelson et al. fails to teach or suggest all of the features of these claims. With respect to independent claim 1, it is submitted that

Nelson et al. fails to teach or suggest a lubricant recirculation member disposed in the housing about the shaft between the commutator and the bushing where the lubricant recirculation member is in the form of a body having a unitarily joined first lubricant recirculation and wear surface portion and a second vibration dampening portion. The Examiner states that the inner tubular portion 202 of the end portion 50' of the motor housing 25' is the lubricant recirculation member, and the Examiner subsequently indicated that the four symmetrically-spaced ribs 212 are also part of the lubricant recirculation member. However, the inner tubular portion 202 and its ribs 212 are not disposed in the housing 25'. Instead, they are part of the housing 25'. The inner tubular portion 202 is not disposed about the shaft 30'. Instead, the inner tubular portion 202 is disposed about the bearing member 210, while the ribs 212 of the portion 202 extend radially outward away from the portion 202. The inner tubular portion 202 is not between the commutator 150' (not shown in the embodiment of Fig. 9) and the bearing member 210. Instead, it is between the bearing member 210 and the remainder of the end portion 50' of the housing 25'.

In addition to the reasons stated above, it is submitted that the inner tubular portion 202 and its ribs 212 cannot be the lubricant recirculation member because the inner tubular portion 202 and its ribs 212 are one, solid axially- and radially-extending portion of the end portion 50' and do not comprise a unitarily joined first lubricant recirculation and wear surface portion and a second vibration dampening portion. For the foregoing reasons, it is respectfully submitted that the invention in claim 1 and its dependent claims 2-8 is neither anticipated nor rendered obvious by Nelson et al.

Nelson et al. also fails to teach or suggest the features of claim 2. The Examiner refers to recess 98 in Fig. 2 as being an internal cavity of the first portion of the lubricant recirculation member. However, the recess 98 is a recess through the bearing 94 in the front end section 40, not in the back end section 50' where the inner tubular portion 202 is located. Even if the contact surface of the inner tubular portion 202 with the bearing member 210 an internal cavity, this contact surface is not a sidewall shaped to recirculate lubricant away from the commutator. Instead, the contact surface is parallel with the shaft and the bearing member 210, which will allow oil, if any, from the bearing member 210 to flow out the ends of the inner

tubular portion 202, without other means of preventing such flow. Therefore, in addition to the reasons set forth with respect to claim 1, the invention of claim 2 is patentable over the Nelson et al.

In addition to the reasons set forth with respect to claim 1, it is respectfully submitted that Nelson et al. also fails to teach or suggest the feature of claim 3 that the first and second portions of the lubricant recirculation member have complementary, mating members for mechanical interlock of the first and second portions. The Examiner states that this is shown in Fig. 9, but the Applicants respectfully submit that the inner tubular portion 202 of Nelson et al. is a solid body with its ribs 212. There are no mating members for mechanical interlock. Thus, claim 3 is allowable over Nelson et al.

With regard to claim 4, it is respectfully submitted that the Examiner's citation to Figs. 2 and 9 for the teaching that the second portion of the body fixedly engages the motor shaft is unavailing because the ribs 212 of the inner tubular portion 202 of Nelson et al. do not fixedly engage the motor shaft 30. Indeed, the ribs 212 extend radially away from the inner tubular portion 202, which is also not fixedly engaged to the motor shaft 30. Instead, the portion 202 surrounds the bearing member 210, which surrounds the motor shaft 30. For the reasons set forth with respect to claim 1, and for the additional reasons stated herein, the invention of claim 4 is neither anticipated nor rendered obvious by Nelson et al.

As explained with respect to claim 3, the inner tubular portion 202 of Nelson et al. is a solid body with its ribs 212. There are no complementary peripheral interlock members formed on either of these portions as the Applicants teach in claim 7 and its dependent claim 8. Thus, in addition to the reasons set forth with respect to claim 1, claims 7 and 8 are allowable over Nelson et al.

The Examiner next rejects claim 11 as being unpatentable under 35 U.S.C. § 103(a) in view of Nelson et al. The Applicants have amended claim 11 slightly to change the non-linear sidewalls to a non-linear sidewall, as only one sidewall may be used. It is respectfully submitted that the Examiner has failed to identify which elements of the inner tubular portion 202 correspond to a base having a wear surface contacting the bushing and a non-linear sidewall

extending away from the base to direct lubricant from the bushing away from the base. The Examiner's rejection improperly combines the wear surface with the non-linear sidewall and states that it would have been obvious to one of skill in the art to make the wear surface of the contact bushing with a non-linear sidewall since the Applicants have not disclosed that a non-linear sidewall solves any stated problem or is for any particular purpose. The Applicants respectfully submit that if the Examiner contends that the inner tubular portion 202 corresponds to the base in that it has a wear surface contacting the bushing, Nelson et al. fails to teach or suggest a non-linear sidewall extending away from the base to direct lubricant from the bushing away from the base.

The Examiner further states that the invention would perform equally well with a linear sidewall. It is respectfully submitted that the Examiner has misapplied the test for obviousness. The proper inquiry is whether there is any teaching or suggestion in the prior art to so modify the inner tubular portion 202 of Nelson et al. and whether Nelson et al. would perform equally well with a non-linear sidewall. Posed this way, it is clear that it would not be obvious to modify Nelson et al. to include a non-linear sidewall extending away from the base to direct lubricant from the bushing away from the base. Such a sidewall would also direct the lubricant away from the bearing member 210. For the foregoing reasons, and for the reasons set forth with respect to claim 1, the invention of claim 11 is not rendered obvious by Nelson et al.

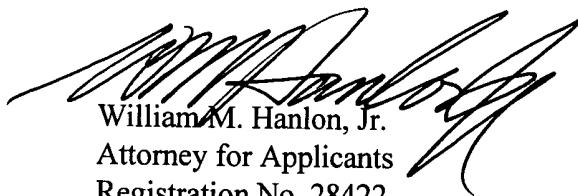
With this Amendment, new claims 12-20 have been added. Claims 12 and 13 depend from claim 11 and respectively add further features of the sidewall and features of the base and the sidewall. Claim 14 depends from claim 4 and adds the features of original claim 9. Claims 15 and 16 depend from independent claim 9. Claim 15 adds the features of claim 3, which claim 16 adds features similar to those of claim 11. Claim 17 depends from claim 16 and includes the further features of the base and sidewall included in claim 13. Claims 18-20 each depend from independent claim 10. Claim 18 adds the features of original claim 9, while claim 19 adds the features of claim 3. Claim 20 includes the features of claim 16, which are similar to those of claim 11. It is respectfully submitted that each of claims 12-20 is allowable based upon both dependence from an allowable claim and based upon the unique features recited therein.

It is respectfully submitted that this Amendment traverses and overcomes all of the Examiner's objections and rejections to the application as originally filed. It is further submitted that this Amendment has antecedent basis in the application as originally filed, including the specification, claims and drawings, and that this Amendment does not add any new subject matter to the application. Reconsideration of the application as amended is requested. It is respectfully submitted that this Amendment places the application in suitable condition for allowance; notice of which is requested.

If the Examiner feels that prosecution of the present application can be expedited by way of an Examiner's amendment, the Examiner is invited to contact the Applicants' attorney at the telephone number listed below.

Respectfully submitted,

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WMH/MLK

Amendments to the Drawings:

The attached sheets of drawing figures include the following changes noted below.

On the first sheet replacing the sheet containing Figs. 1 and 2:

In Figure 2, arrow heads have been added to the reference lines labeled 16 and 18.

Also, the reference arrow to element 34 has been redirected to the armature 34 from the shaft 24.

On the second sheet replacing the sheet containing Figs. 3 and 4:

In Figure 3, an omitted reference line to the brush 42 in the brush box 46 has been added. The reference line labeled 42 has been corrected to refer to the spring 43.

In Figure 4, the reference line labeled 76 has been corrected to refer to a finger 74. Also, a reference line to a lip 76 has been added. The reference line labeled 84 has been corrected to refer to the oil throw portion 82, and the reference line labeled 82 has been corrected to refer to the vibration dampening portion 84.

On the third sheet replacing the sheet containing Figs. 5 and 6:

In Figure 5, the existing reference lines to a finger 74 and a lip 76 have been moved to more clearly show the locations of the elements. The reference line 60 has been relocated to the correct side of the brush holder 48.

In Figure 6, the arrow for the brush holder 48 has been redirected to more clearly point to the element.

On the fourth sheet replacing the sheet containing Figs. 7, 8 and 11:

In Figure 7, the reference lines for leg portions 52 and 54 have been redirected to the correct elements.

In Figure 11, a reference line has been added to the surface 106 of the base 100 opposite the first surface 104.

On the fifth sheet replacing the sheet containing Figs. 9, 10 and 14:

In Figure 10, the reference line 74 has been lengthened to indicate the location of a finger 74. The reference line for the outer peripheral sidewall 128 has been redirected to more clearly point to the element.

On the sixth sheet replacing the sheet containing Figs. 12, 13 and 15:

In Figure 12, a reference line has been added to the post 132.

Attachment: Six (6) Replacement Sheets